

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-040 GRR	WILL	18	1

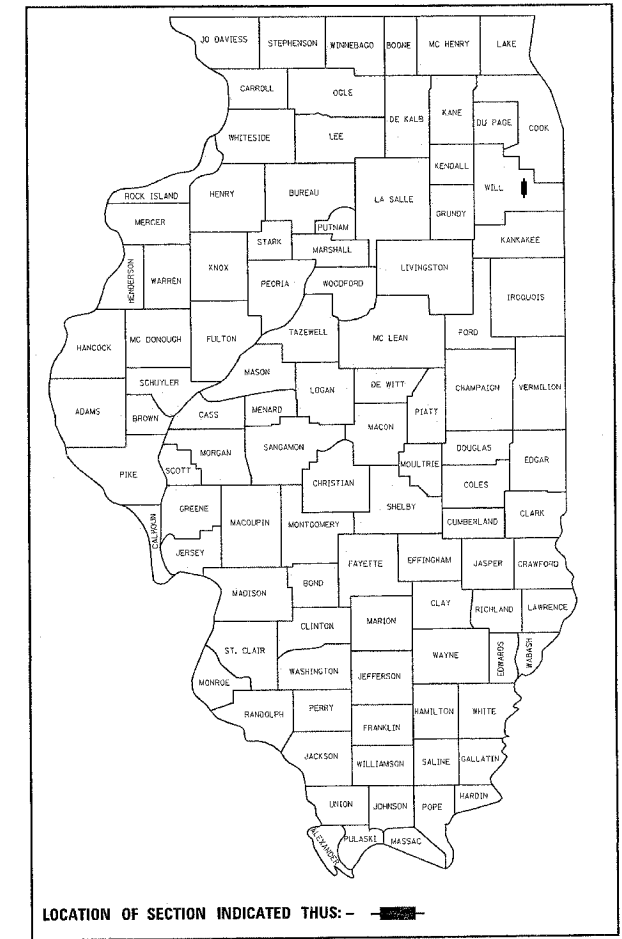
D-91-272-05

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**PLANS FOR PROPOSED  
 HIGHWAY**

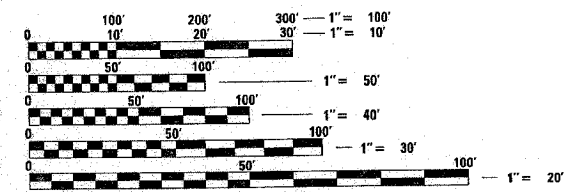
FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN THE VILLAGE OF CHANNAHON IN WILL COUNTY

FAI 55 : (INTERSTATE 55)  
 (US 6 TO SOUTH OF I-80)  
 SECTION: 2005-040 GRR  
**HIGH TENSION CABLE GUARDRAIL**  
 PROJECT: HS-055-6(217)250  
**WILL COUNTY**  
**C-91-272-05**

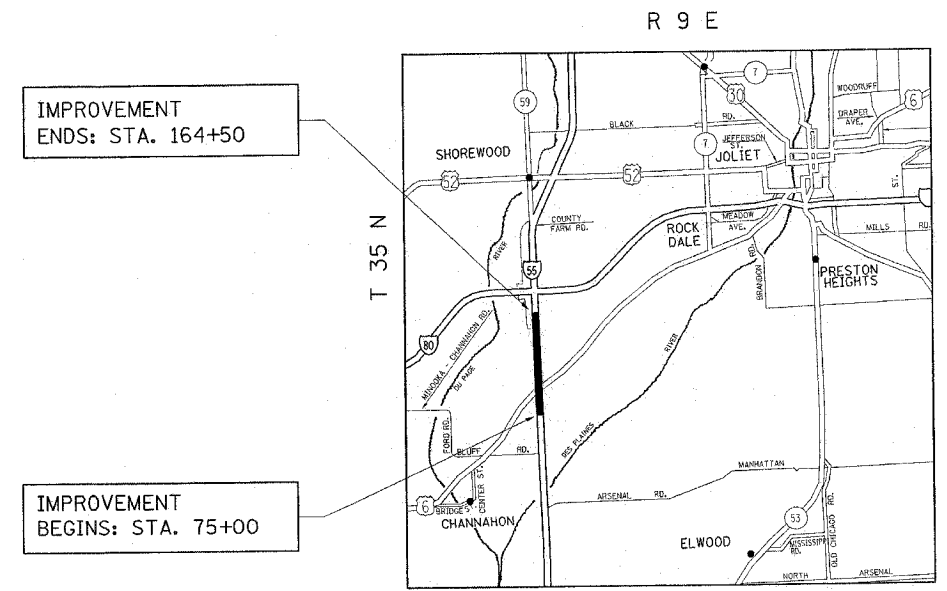


DISTRICT ONE DESIGN PLAN PREPARATION ENGINEER:  
 KEN ENG (847) 705-4247



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
 1-800-892-0123



**TRAFFIC DATA**  
 ADT = 40,000 - 60,000  
 POSTED SPEED LIMIT= 65 MPH

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED *March 29 20 06*

*Diane M. O'Keefe / Ord*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

*May 12, 20 06*  
*Mike Wine / RD*  
 ENGINEER OF DESIGN AND ENVIRONMENT

*May 12, 20 06*  
*Milton R. Sees, P.E. / RD*  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY  
 OF THE STATE OF ILLINOIS**

GROSS LENGTH OF IMPROVEMENT = 8950 LINEAL FEET = 1.7 MILES  
 NET LENGTH OF IMPROVEMENT = 8354 LINEAL FEET = 1.58 MILES

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-040 GRR	WILL.	18	2
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
CONTRACT 60A11				

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	SCHEDULE OF QUANTITIES
5	TYPICAL SECTIONS
6-12	EXISTING AND PROPOSED ROADWAY PLAN
13	TRAFFIC CONTROL FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES
14-18	HIGH TENSION GUARDRAIL DETAILS

LIST OF STATE STANDARDS

<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
701101-01	OFF-RD OPERATIONS, MULTILANE LESS THAN 4.5 M (15') AWAY FOR SPEEDS $\geq$ 45 MPH
701400-02	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-03	LANE CLOSURE, FREEWAY/EXPRESSWAY
702001-06	TRAFFIC CONTROL DEVICES

PLAN NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800)892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED.)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- THE CONTRACTOR SHALL CALL STATE ELECTRICAL CONTRACTOR AT (773) 287-7600 TO LOCATE STATE OWNED FACILITIES.
- THE CONTRACTOR SHALL WORK IN THE DIRECTION OF TRAFFIC.
- THE CONTRACTOR WILL NOT BE ALLOWED TO STORE MATERIALS OVERNIGHT IN THE MEDIAN.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**INTERSTATE 55  
INDEX OF SHEETS  
LIST OF STATE STANDARDS  
PLAN NOTES**

SCALE: VERT. : NONE  
HORIZ. : NONE  
DATE :  
DRAWN BY: HMO  
CHECKED BY:

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		90% FED. 10% STATE URBAN SFTY-3J				
X0325334	HIGH TENSION CABLE GUARDRAIL	FOOT	8047	8047				
<del>X0325332</del>	<del>HIGH TENSION CABLE GUARDRAIL END ANCHOR</del>	<del>EACH</del>	<del>3</del>	<del>3</del>				
X0325333	HIGH TENSION CABLE GUARDRAIL TERMINAL	EACH	6	6				
25000750	MOWING	ACRE	1.92	1.92				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3				
67100100	MOBILIZATION	L SUM	1	1				
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAY)	L SUM	1	1				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT						

I:\Projects\0517205\0517205.dwg - 1:5000 - 2/20/06

Rev.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES
NAME	DATE	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-040 GRR	WILL	18	4
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT 60A11				

HIGH TENSION CABLE GUARDRAIL

STA.	TO	STA.	DISCRIPTION	TOTAL LENGTH (FT.)
75+51.25	TO	88+40	66 POST SPACES AT 20'	1288.75
92+21.25	TO	142+70	254 POST SPACES AT 20'	5048.75
146+90	TO	163+98.75	87 POST SPACES AT 20'	1708.75
TOTAL				8046.25

HIGH TENSION CABLE GUARDRAIL TERMINAL

STA.	TO	STA.	DISCRIPTION	TOTAL LENGTH (FT.)	GRAND TOTAL LENGTH (FT.)	UNIT (EACH)
75+00	TO	75+18.75	3 POST SPACES AT 6'-3"	18.75	51.25	1
75+18.75	TO	75+51.25	5 POST SPACES AT 6'-6"	32.5		
88+40	TO	88+58.75	3 POST SPACES AT 6'-3"	18.75	51.25	1
88+58.75	TO	88+91.25	5 POST SPACES AT 6'-6"	32.5		
91+70	TO	91+88.75	3 POST SPACES AT 6'-3"	18.75	51.25	1
91+88.75	TO	92+21.25	5 POST SPACES AT 6'-6"	32.5		
142+70	TO	142+88.75	3 POST SPACES AT 6'-3"	18.75	51.25	1
142+88.75	TO	143+21.25	5 POST SPACES AT 6'-6"	32.5		
146+38.75	TO	146+57.5	3 POST SPACES AT 6'-3"	18.75	51.25	1
146+57.5	TO	146+90	5 POST SPACES AT 6'-6"	32.5		
163+98.75	TO	164+17.5	3 POST SPACES AT 6'-3"	18.75	51.25	1
164+17.5	TO	164+50	5 POST SPACES AT 6'-6"	32.5		
TOTAL					307.50	6

REVISIONS	
NAME	DATE

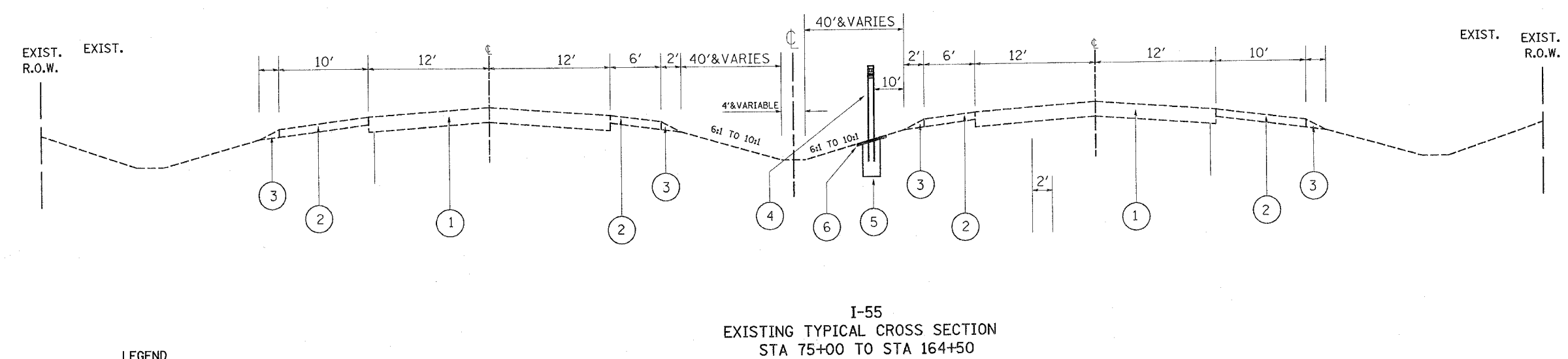
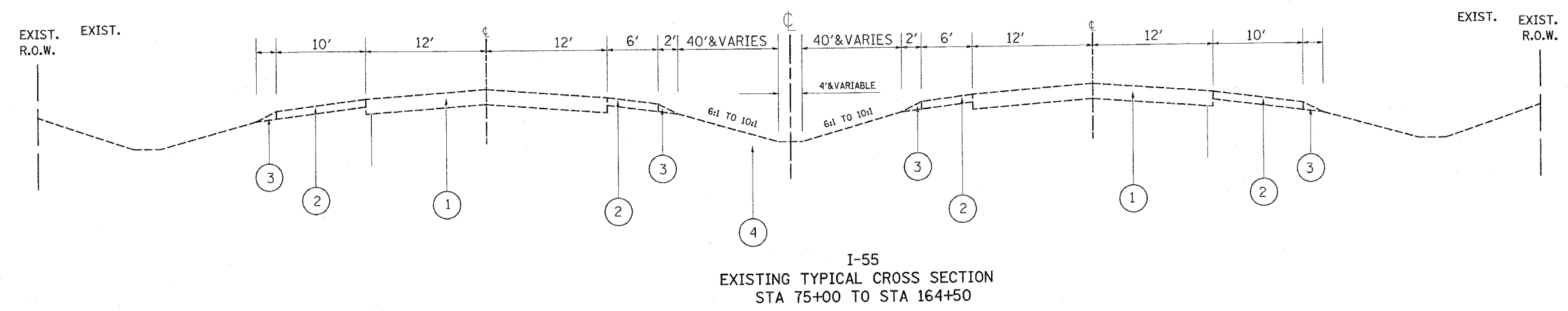
ILLINOIS DEPARTMENT OF TRANSPORTATION

**INTERSTATE 55  
SCHEDULE OF QUANTITIES**

SCALE: VERT. : NONE  
HORIZ. : NONE

DATE: \_\_\_\_\_ DRAWN BY: HMO  
CHECKED BY: \_\_\_\_\_

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-040 GRR	WILL	18	5
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
CONTRACT 60A11				



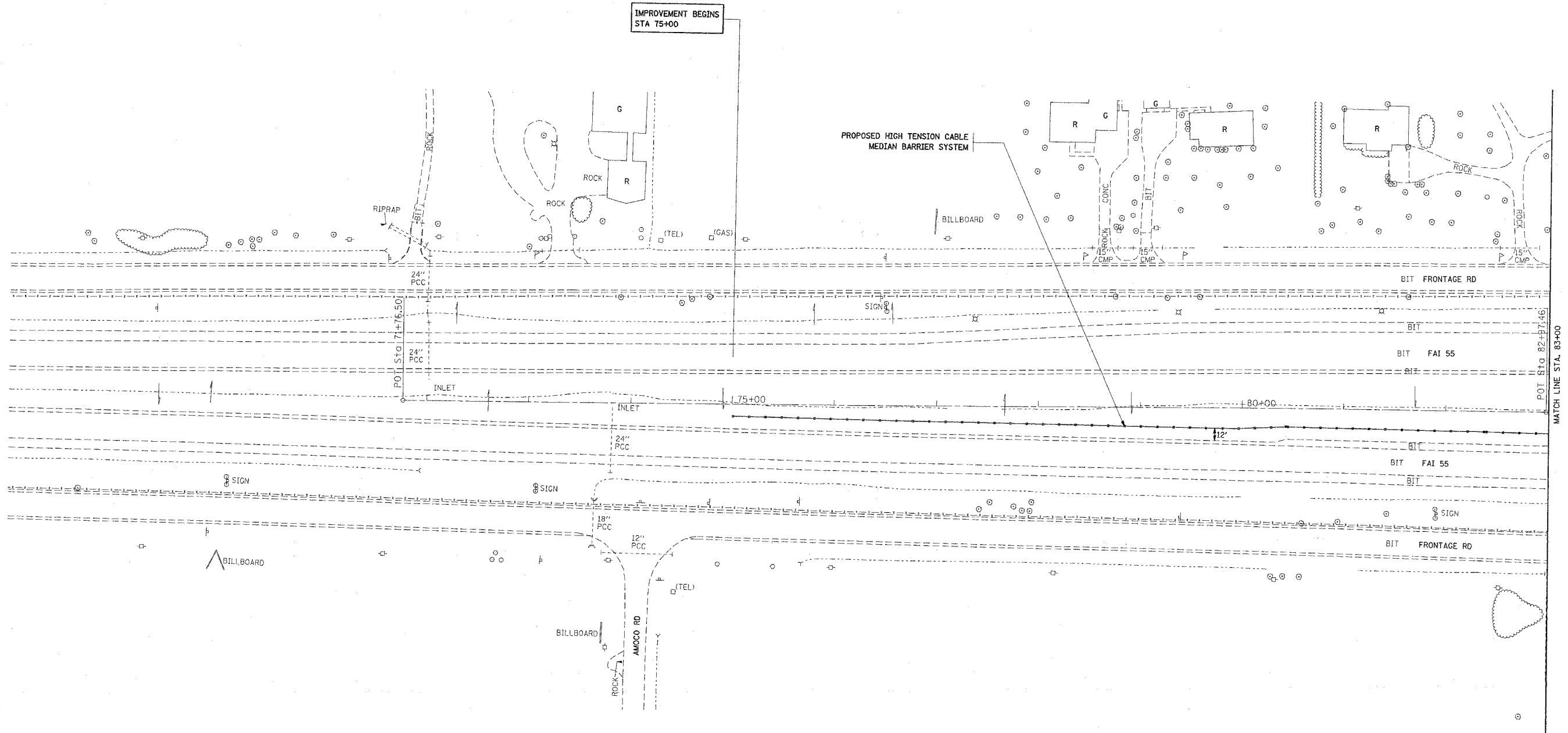
**LEGEND**

- ① EXISTING 10" P.C.C. PAVEMENT
- ② EXISTING P.C.C. SHOULDER
- ③ EXISTING AGGREGATE SHOULDER, 8"
- ④ PROPOSED HIGH TENSION CABLE GUARDRAIL SYSTEM
- ⑤ CONCRETE FOUNDATION - INCLUDED IN THE COST OF THE APPLICABLE HIGH TENSION CABLE GUARDRAIL PAY ITEM
- ⑥ PROPOSED MOWING, (10' WIDE)

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION <b>INTERSTATE 55</b>  EXISTING AND PROPOSED TYPICAL SECTION
NAME	DATE	
		SCALE : NONE 3/29/2006
DRAWN BY: HMO		CHECKED BY:

\*REF-topo10

CONTRACT NO. 60A11			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
55	2005-040 GRR	WILL	18
STA. 75+00		TO STA. 83+00	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



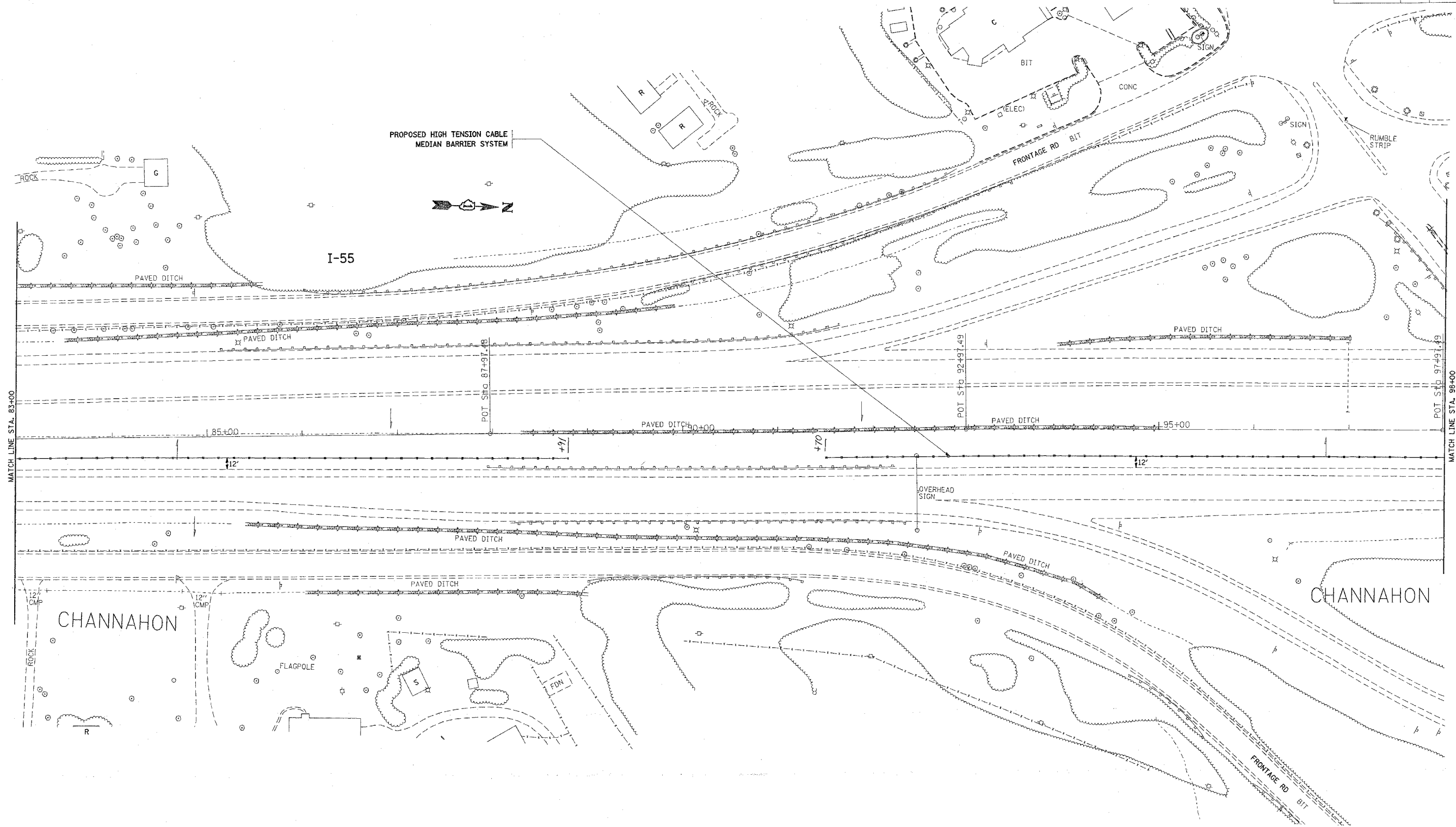
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 USER NAME = oasanth

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
  
 FAI 55/ I-55  
 US 6 TO SOUTH OF I-80  
 EXISTING / PROPOSED ROADWAY PLAN  
  
 SCALE: VERT. 1"=50'  
 HORIZ. 1"=50'  
 DATE 3/22/2006  
  
 DRAWN BY: HMO  
 CHECKED BY:

\*REF-topo01

CONTRACT NO. 60A11			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
55	2005-040 GRR	WILL	18
STA. 83+00		TO STA. 98+00	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

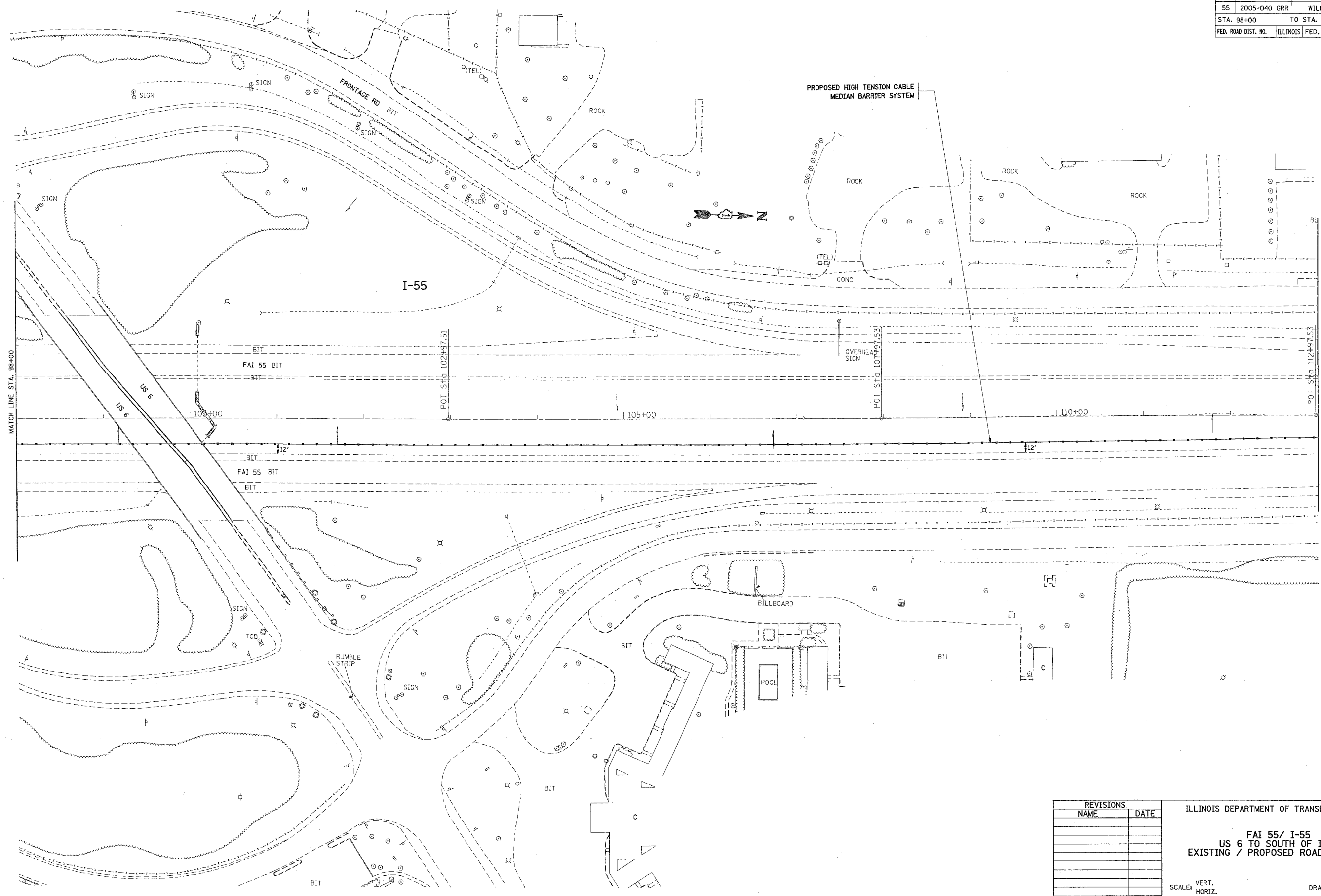
**FAI 55/ I-55  
 US 6 TO SOUTH OF I-80  
 EXISTING / PROPOSED ROADWAY PLAN**

SCALE: VERT. 1"=50'  
 HORIZ. DATE 3/22/2006

DRAWN BY: HMO  
 CHECKED BY:

\*REF-top02

CONTRACT NO. 60A11					
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
55	2005-040 GRR	WILL	18	8	
STA. 98+00 TO STA. 113+00					
FED. ROAD DIST. NO. ILLINOIS			FED. AID PROJECT		



PLOT DATE = 3/22/2005  
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 USER NAME = camanm

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

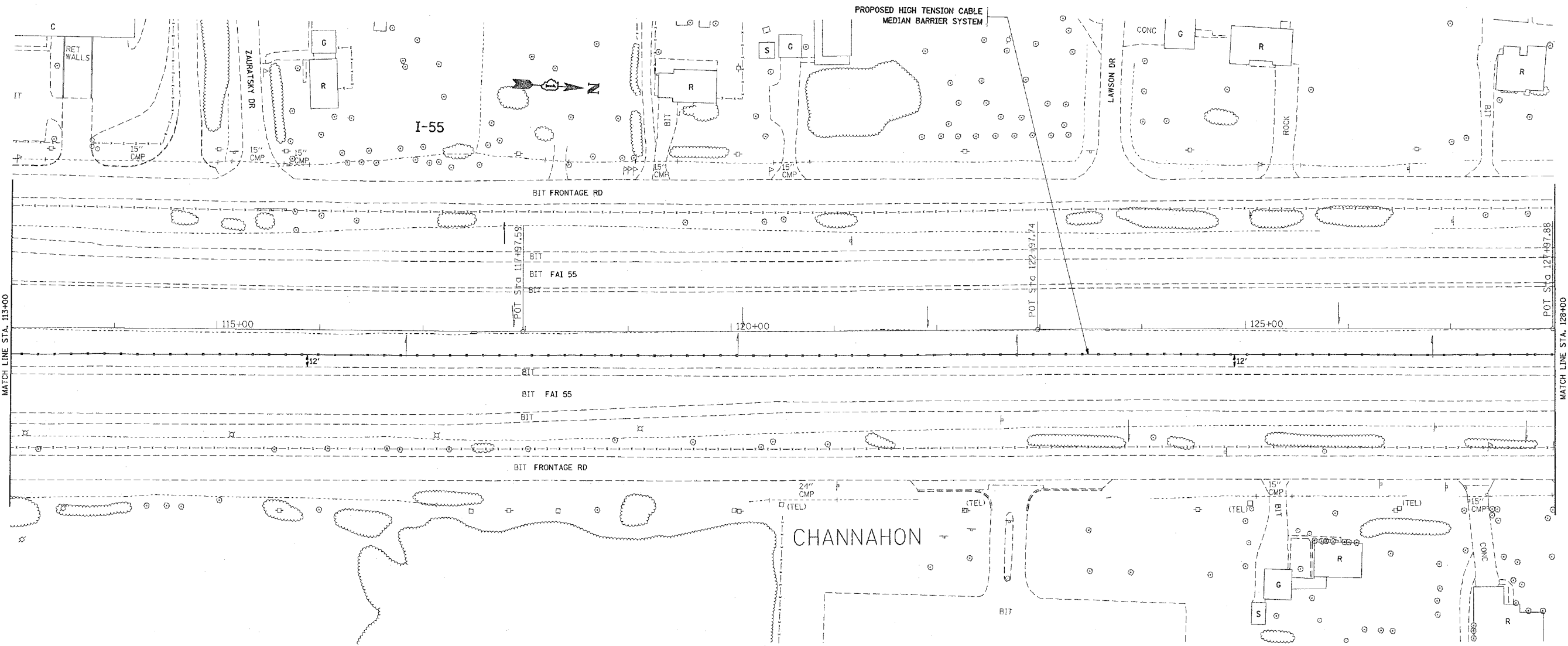
**FAI 55/ I-55**  
**US 6 TO SOUTH OF I-80**  
**EXISTING / PROPOSED ROADWAY PLAN**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE \_\_\_\_\_

DRAWN BY: HMO  
 CHECKED BY: \_\_\_\_\_



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-040 GRR	WILL	18	9
STA. 113+00		TO STA. 128+00		
FED. ROAD DIST. NO.		FED. AID PROJECT		



PLOT DATE = 3/22/2005  
 PLOT SCALE = 1/8" = 1'-0"  
 USER NAME = csmahm

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 FAI 55/ I-55  
 US 6 TO SOUTH OF I-80  
 EXISTING / PROPOSED ROADWAY PLAN

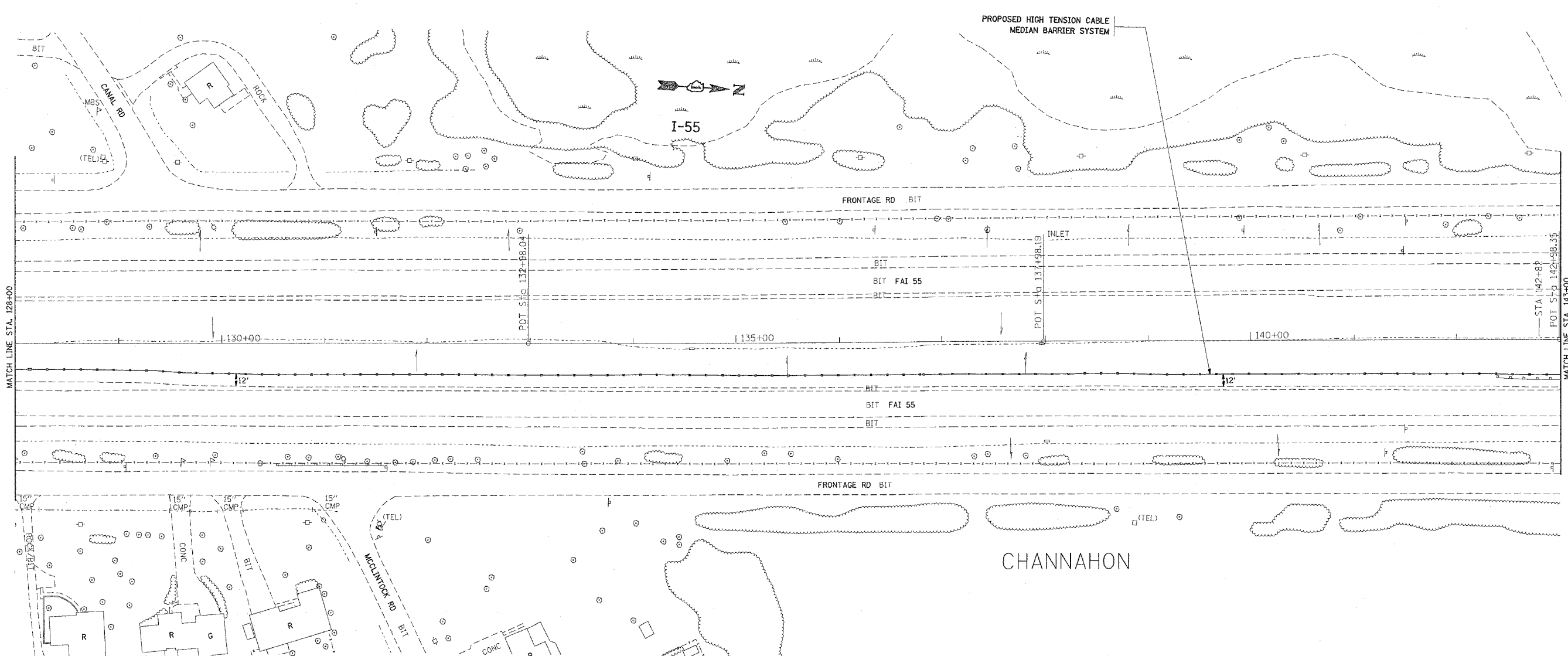
SCALE: VERT.  
 HORIZ.  
 DATE

DRAWN BY: HMO  
 CHECKED BY:

\*REF-topo04

CONTRACT NO. 60A11

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-040 GRR	WILL	18	10
STA. 128+00		TO STA. 143+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



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 USER NAME = ommahm

REVISIONS	
NAME	DATE

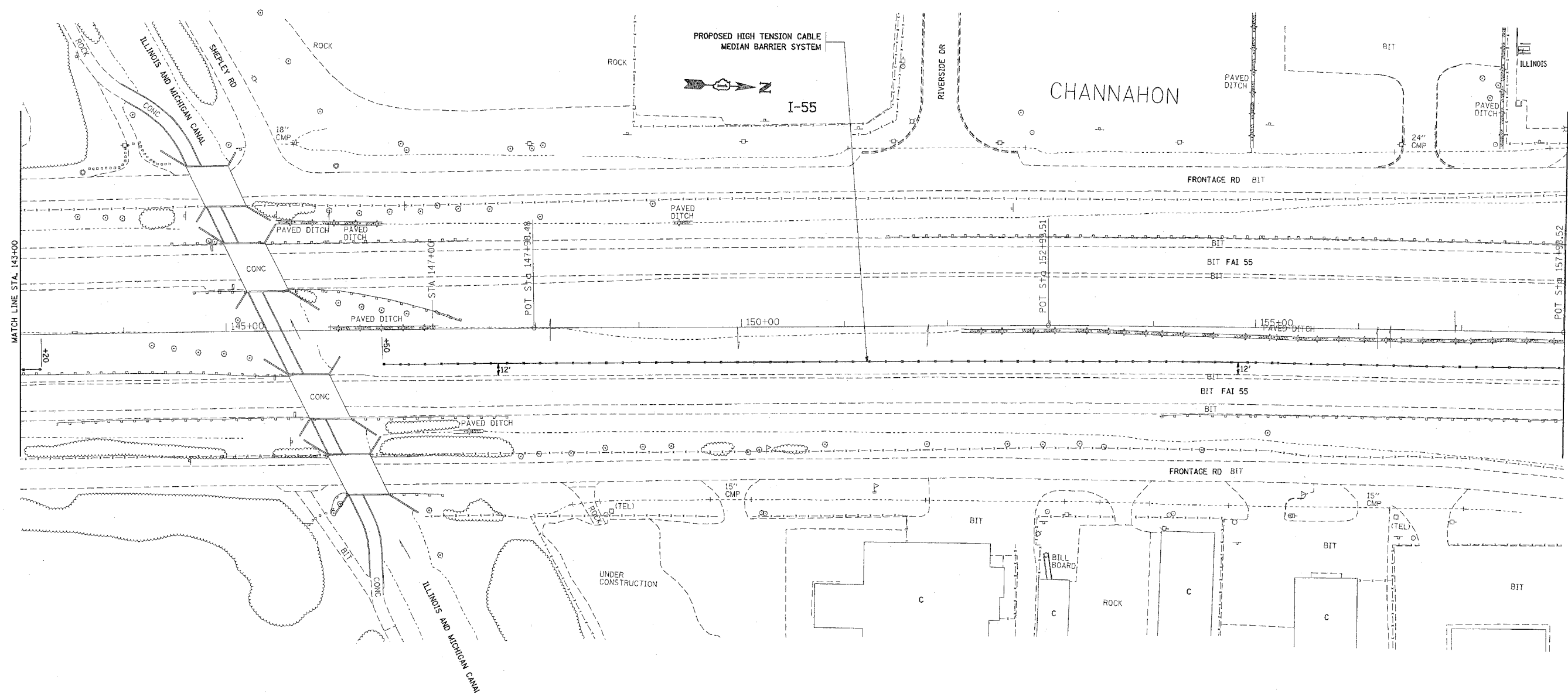
ILLINOIS DEPARTMENT OF TRANSPORTATION

**FAI 55/ I-55**  
**US 6 TO SOUTH OF I-80**  
**EXISTING / PROPOSED ROADWAY PLAN**

SCALE: VERT. 1"=50'  
 HORIZ. 1"=50'  
 DATE 3/22/2006

DRAWN BY: HMO  
 CHECKED BY:

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-040 GRR	WILL	18	11
STA. 143+00		TO STA. 158+00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



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 USER NAME = saraman

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**FAI 55/ I-55**  
**US 6 TO SOUTH OF I-80**  
**EXISTING / PROPOSED ROADWAY PLAN**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_

DATE \_\_\_\_\_

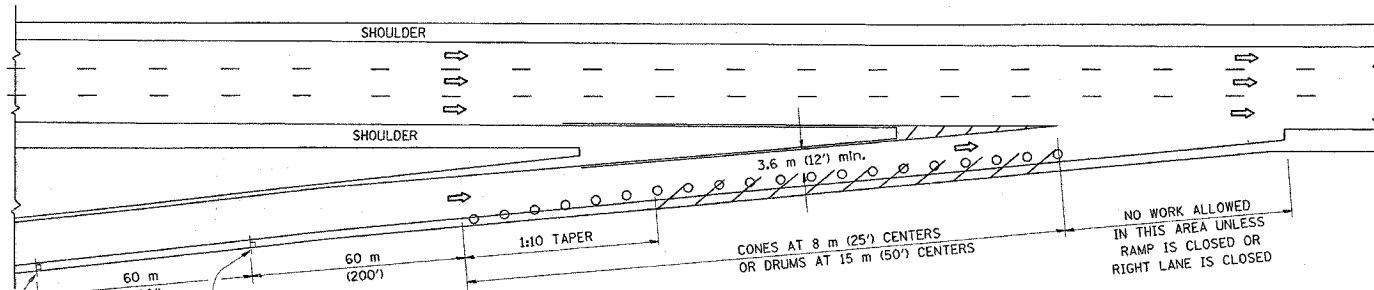
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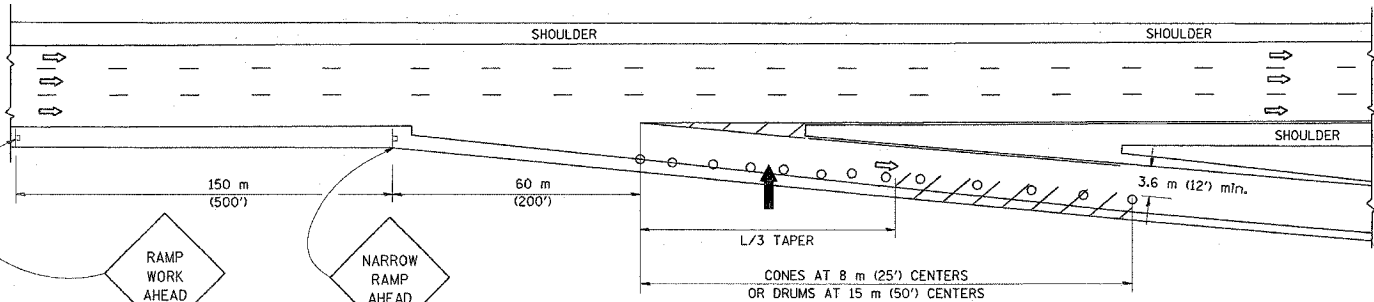
PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS

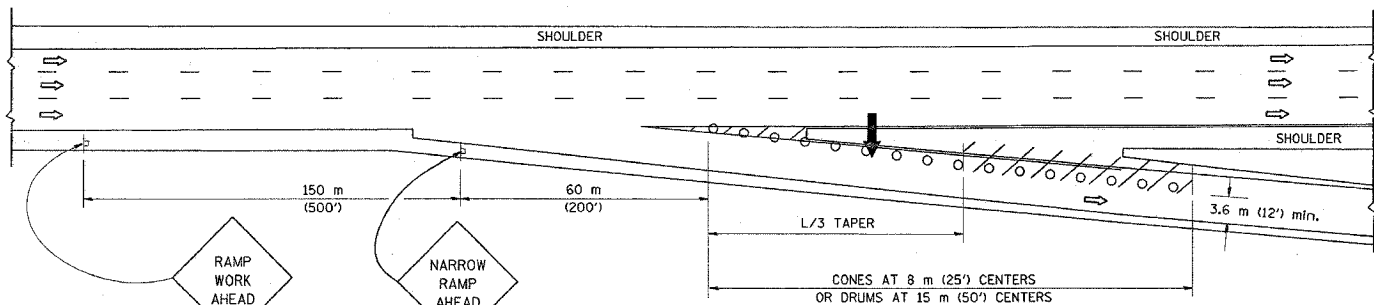
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
65	2005-040GR	WILL	16	13
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



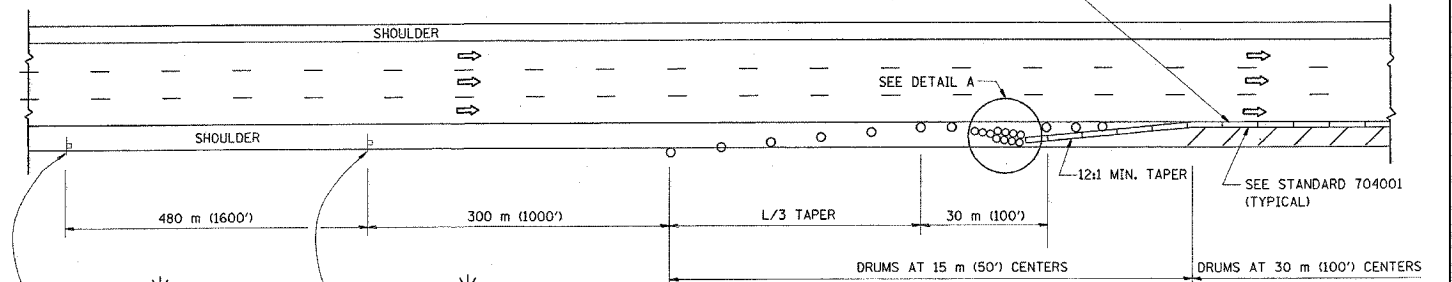
TYPICAL ENTRANCE RAMP



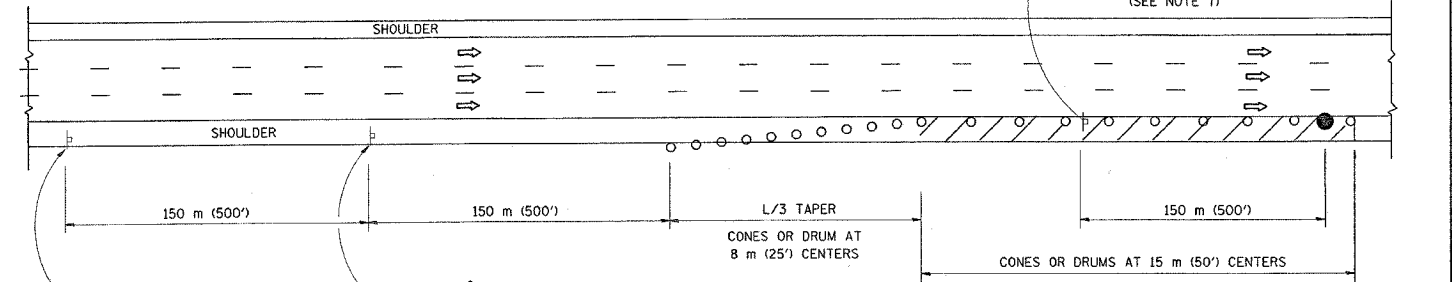
TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

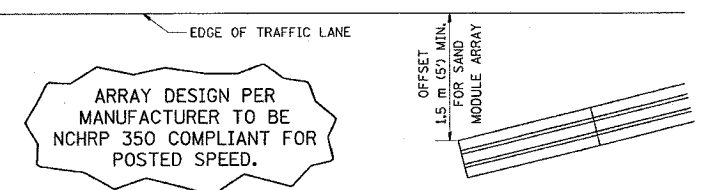
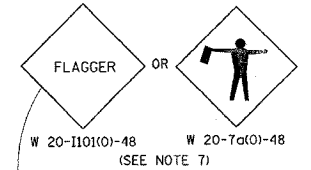


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:  
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 4.5 m (15') TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"  
 IMPACT ATTENUATOR, TEMPORARY  
 (SEE NOTE 5)

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- CONES - 700 (28) IN HEIGHT

GENERAL NOTES

1. THE "L" DISTANCE EQUALS:  
 SPEED LIMIT FORMULAS  
 80 km/h (45 mph) METRIC ENGLISH  
 OR GREATER: L=0.65(W/S) L=(W)(S)  
 W = WIDTH OF OFFSET IN METERS (FEET)  
 S = NORMAL POSTED SPEED KM/H (MPH)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

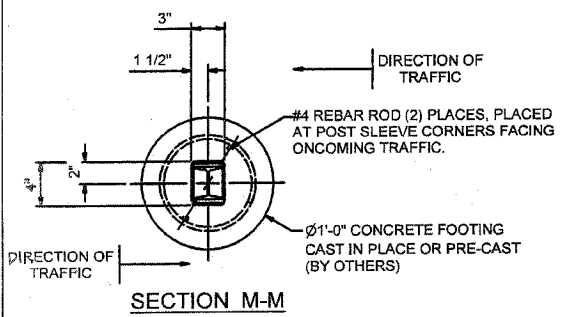
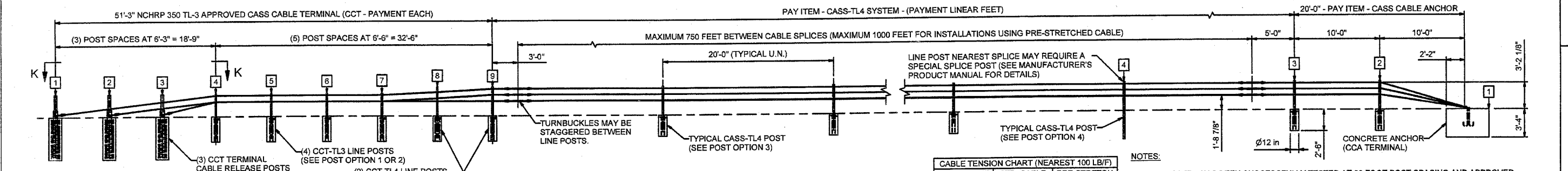
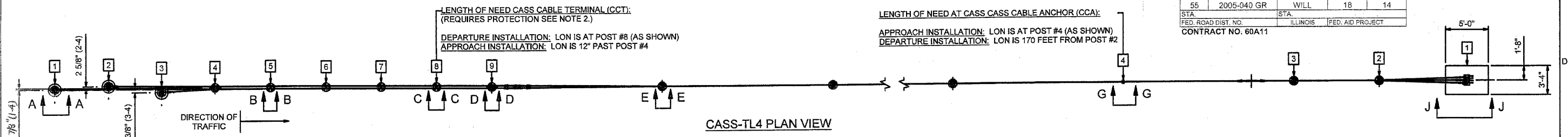
5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE "TRAFFIC BARRIER TERMINAL, TYPE III, TEMPORARY" DEVICE TO MEET NCHRP350 FOR POSTED SPEED.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
  - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
  - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCR OACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 30 m (100') TO 60 m (200') IN ADVANCE OF THE WORKERS.

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03
JAF	2/06

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TRAFFIC CONTROL DETAILS  
 FOR FREEWAY  
 SHOULDER CLOSURES  
 PARTIAL RAMP CLOSURES  
 DESIGNED BY: DWS  
 DRAWN BY:  
 CHECKED BY:  
 TC-17

SCALE: NONE  
 DATE: 3/17/2006

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-040 GR	WILL	18	14
STA.		STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60A11				



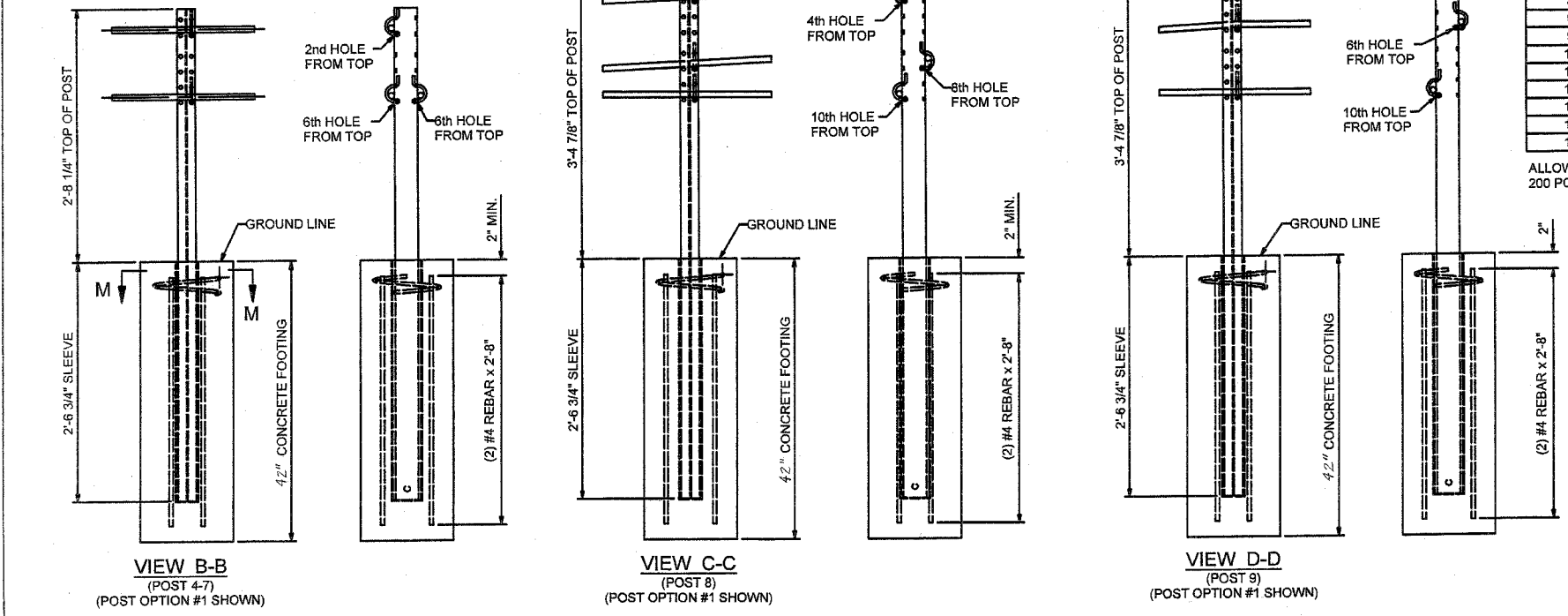
**CABLE TENSION CHART (NEAREST 100 LB/F)**

FAHRENHEIT	STD. CABLE	PRE-STRETCH
DEGREES	LB/FORCE	LB/FORCE
-15	8800	7500
-10	8600	7300
-5	8400	7100
0	8200	7000
5	8000	6800
10	7800	6600
15	7600	6500
20	7400	6300
25	7200	6100
30	7000	6000
35	6800	5800
40	6600	5600
45	6400	5500
50	6200	5300
55	6000	5100
60	5800	5000
65	5600	4800
70	5400	4600
75	5200	4500
80	5000	4300
85	4800	4100
90	4600	4000
95	4400	3800
100	4200	3600
105	4000	3500
110	3800	3300
115	3600	3100
120	3400	3000
125	3200	2800

- NOTES:**
- CASS-TL4 HAS BEEN SUCCESSFULLY TESTED AT 20 FOOT POST SPACING AND APPROVED TO NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT 350 TEST LEVEL 4 (NCHRP 350-TL4). CASS CABLE TERMINAL (CCT) HAS BEEN SUCCESSFULLY TESTED AND APPROVED TO NCHRP 350-TL3.
  - IF CASS-TL4 IS INSTALLED ON THE NATIONAL HIGHWAY SYSTEM (NHS), AN NCHRP 350-TL3 APPROVED TERMINAL (CCT) SHALL BE USED ON APPROACH AND DEPARTURE TERMINATIONS; OR, A NON-NCHRP 350-TL3 ANCHOR (CCA) MAY BE USED ON APPROACH AND DEPARTURE TERMINATIONS IF THE ANCHOR IS LOCATED OUTSIDE THE CLEAR ZONE OR PROTECTED BY OTHER MEANS (CRASHWORTHY BARRIER, TERMINALS, ETC.).
  - CASS-TL4 SHALL BE INSTALLED ON SHOULDERS OR MEDIANS WITH SLOPES OF 6:1 OR FLATTER WITHOUT OBSTRUCTIONS, DEPRESSIONS, ETC. THAT MAY SIGNIFICANTLY AFFECT THE STABILITY AN ERRANT VEHICLE.
  - CASS-TL4 POST SPACING MAY BE MODIFIED TO AVOID OBSTACLES THAT CONFLICT WITH THE INSTALLATION OF CASS-TL4 LINE POSTS. NO POST SPACE CAN EXCEED THE MAXIMUM POST SPACE LIMIT OF 20'-0".
  - A CCT POST FOUNDATION MAY BE DRILLED THROUGH EXISTING PAVEMENT.
  - REBAR RING AND REBAR RODS ARE NOT REQUIRED IF CASS-TL4 IS INSTALLED IN A 3 FT (MINIMUM) WIDTH MOW STRIP OF 6 IN. (MINIMUM) ASPHALT DEPTH OR 3 IN. (MINIMUM) REINFORCED CONCRETE DEPTH. IF MINIMUM REQUIREMENTS ARENT MET CONTACT TRINITY INDUSTRIES TO DISCUSS FOOTINGS.
  - CONSULT THE MANUFACTURER'S INSTALLATION MANUAL FOR ADDITIONAL INFORMATION.

TRINITY HIGHWAY SAFETY PRODUCTS, INC.  
 2525 STEMMONS FREEWAY  
 DALLAS, TX 75207  
 EMAIL: PRODUCT.INFO@TRIN.NET  
 PHONE: (800) 644-7976

No.	CASS-TL4 POST OPTIONS
1	CCT - TERMINAL POST 1 - 9 - IN CONCRETE
2	CCT - TERMINAL POST 1 - 9 - WITH SPOIL PLATE
3	CASS-TL4 POST - IN CONCRETE
4	CASS-TL4 POST- DRIVEN



ALLOWABLE DEVIATION FROM CHART:  
 200 POUNDS/FORCE.

**REVISION HISTORY**

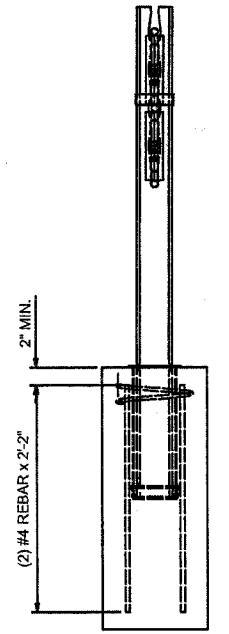
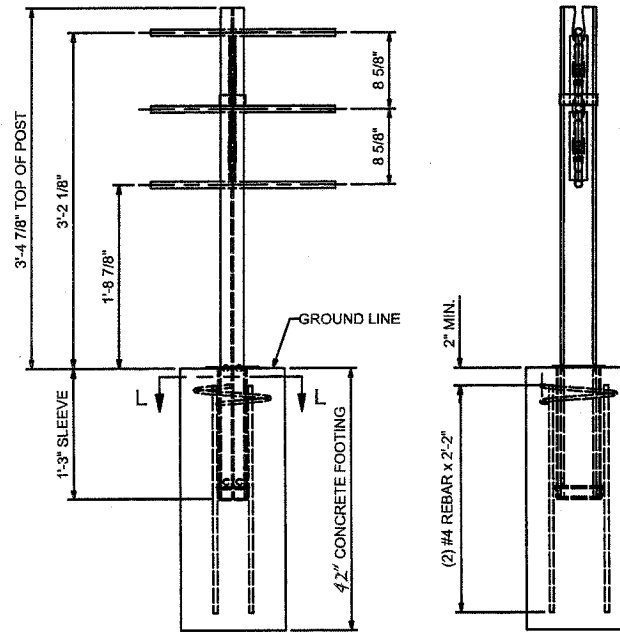
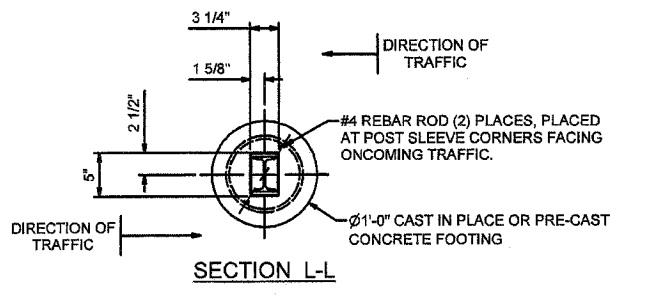
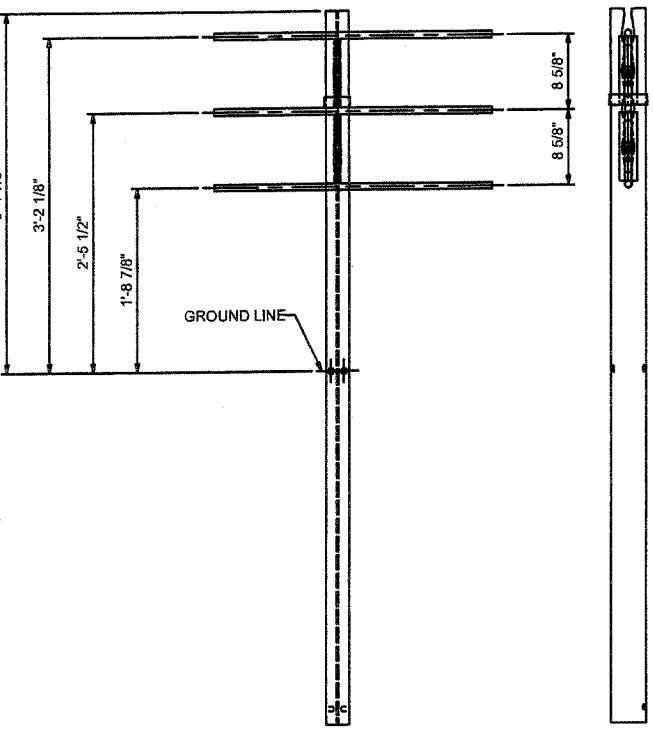
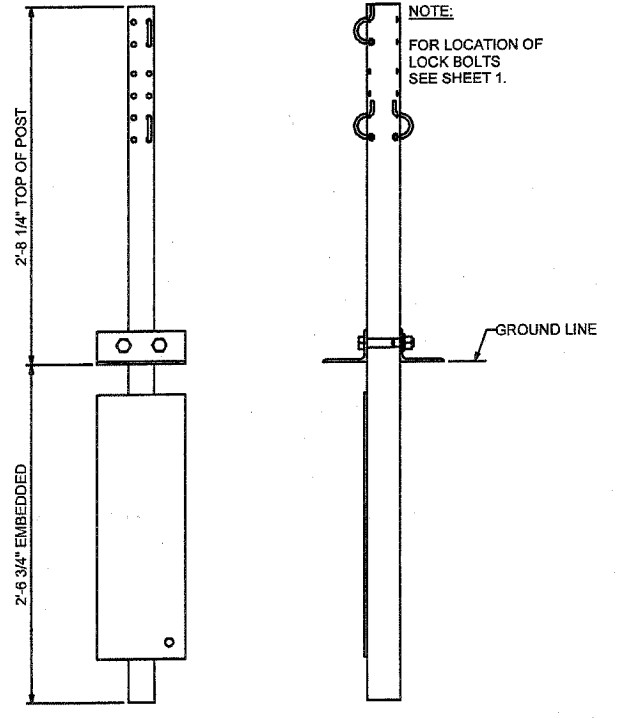
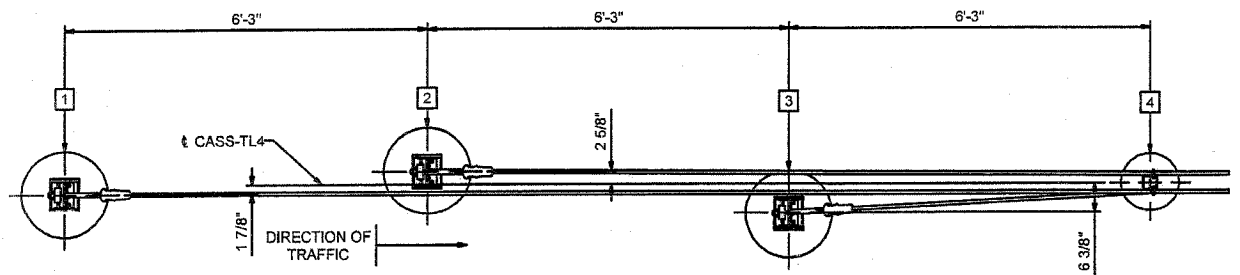
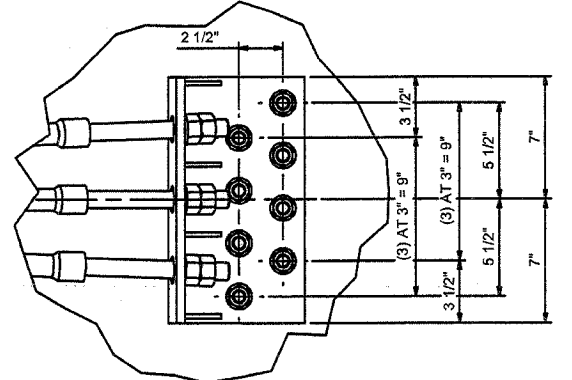
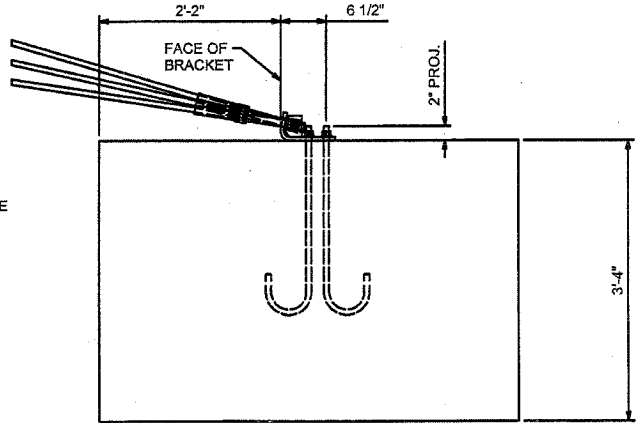
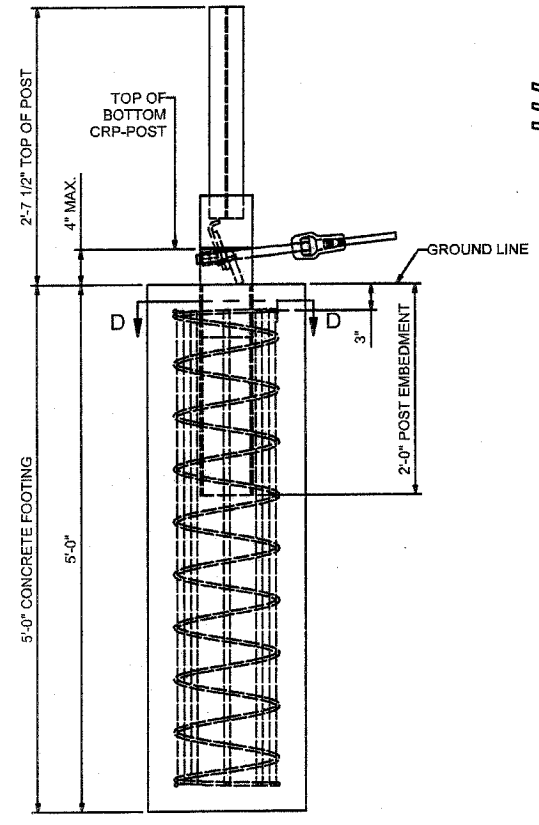
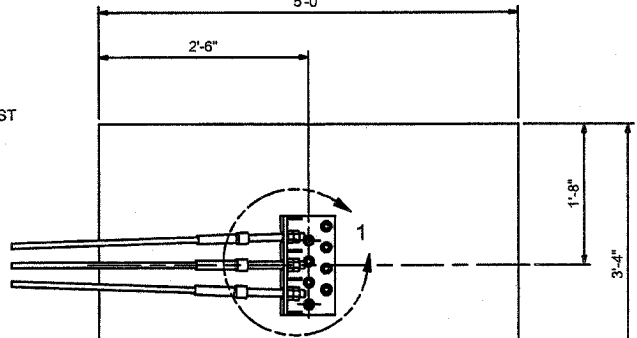
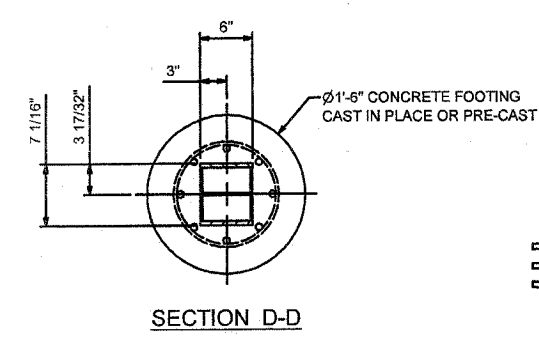
REV	DESCRIPTION	DATE	BY
1	ADDED DRIVEN POST OPTION	3/2/2006	E.A.S.
2	ADDED REBAR TERMINAL POST 4-9	3/9/2006	E.A.S.

**CASS-TL4 CABLE GUARDRAIL SAFETY SYSTEM**

TRINITY HIGHWAY SAFETY PRODUCTS, INC.

GALV SPEC:  
 SHIPPING WT:  
 DRW: E.A.S. 12/2/2005  
 CHK:  
 SHT: 1 OF 5 SIZE: D  
 DWG NO: SS-740  
 REV: 2

FBI	SECTION	COUNTY	TOTAL SHEETS
55	2005-040 GR	WILL.	18
STA	ILLINOIS	HEAD AD PROJECT	15
CONTRACT NO. 60A11			



CASS-TL4 CABLE GUARDRAIL SAFETY SYSTEM		GALV SPEC:
TRINITY HIGHWAY SAFETY PRODUCTS, INC.		SHIPPING WT:
DRW: E.A.S	12/2/2005	CHK:
SHT: 2 OF 5	SIZE: D	DWG NO:
REV: 2	SS-740	REV: 2

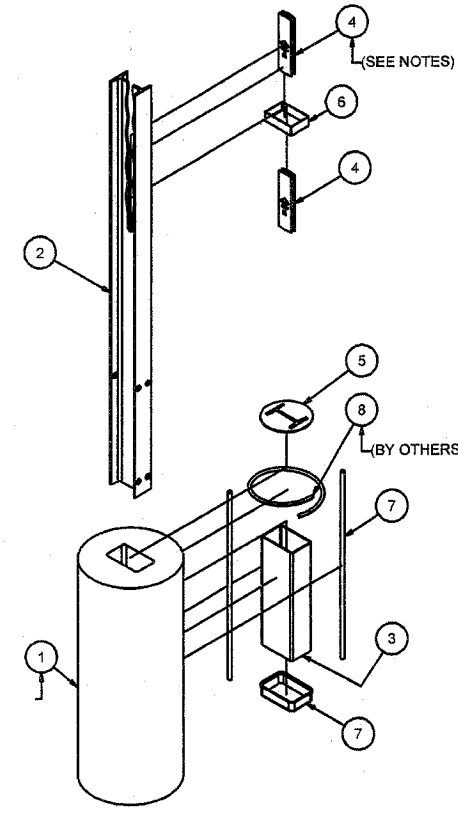
PROJ: CASS-TL4

3-29-06

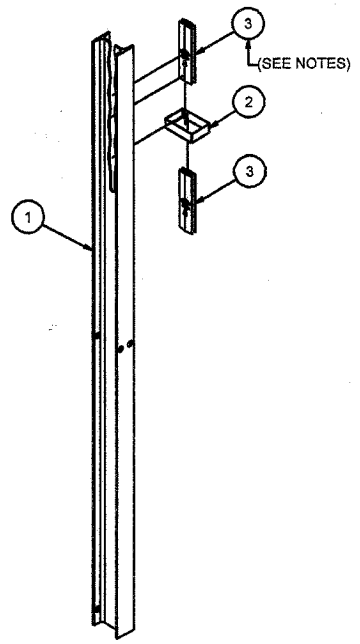
PARTS LIST CASS-TL4 CONCRETE POST ASSEMBLY				
QTY	PART No	ITEM	TITLE	Lbs / Each
1		1	CONCRETE POST - CASS POST	264.40
1	33954G	2	CASS-TL4 POST - CONCRETE	34.50
1	33968B	3	POST SLEEVE - CONCRETE POST	8.00
2	5703B	4	CASS-TL4 CABLE SPACER	0.24
1	5708B	5	SLEEVE COVER - CASS-TL POST	0.11
1	5707T	6	CASS-TL - POST STRAP	0.23
2	5901B	7	#4 REBAR - SYSTEM POST	1.45
1	5747B	7	SLEEVE CAP - CASS-TL POST	0.14
1	5836B	8	CONCRETE REINFORCING RING	0.88

PARTS LIST CASS-TL4 DRIVEN POST ASSEMBLY				
QTY	PART No	ITEM	TITLE	Lbs / Each
1	33957G	1	CASS-TL4 POST - DRIVEN	50.62
1	5707T	2	CASS-TL - POST STRAP	0.23
2	5703B	3	CASS-TL4 CABLE SPACER	0.24

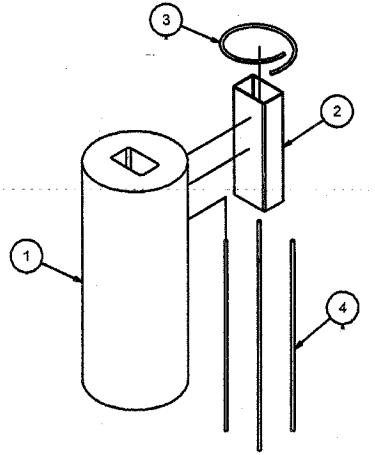
FAI	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-040 GR	WILL	18	16
STA.		STA.	FED. AID PROJECT	
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 60A11	



CASS-TL4 POST - IN CONCRETE  
(POST OPTION #3 - CAST IN PLACE)

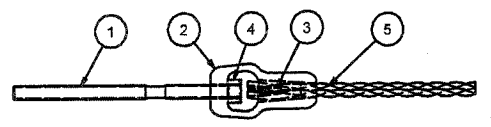


CASS-TL4 POST - DRIVEN  
(POST OPTION #4 - DRIVEN)



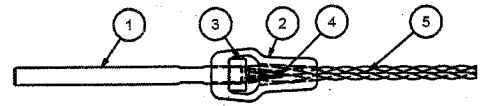
PRE-CAST CONCRETE POST ASSEMBLY  
(POST OPTION #3 - PRE-CAST OPTION)

PARTS LIST - PRE-CAST CONCRETE FOOTING				
QTY	PART No	ITEM	TITLE	Lbs / Each
1		1	CONCRETE POST - CASS POST	264.40
1	33968B	2	POST SLEEVE - CONCRETE POST	8.00
1	5836B	3	CONCRETE REINFORCING RING	0.88
4	5876B	4	#3 REBAR - CONCRETE FOOTING	0.82



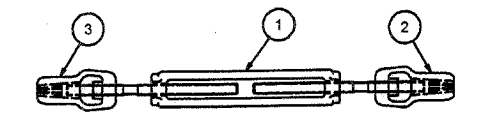
3/4" CABLE FIELD SPLICE - 5634G & 5635G  
(5634G SHOWN, 5635G SIMILAR)

PARTS LIST - 5634G				
QTY	PART No	ITEM	TITLE	Lbs / Each
1		1	3/4" STUD FLATTENED - L.H.T.	1.62
1	4190G	2	CABLE END CASTING	3.78
1	4199B	3	3/4" CABLE WEDGE (3 x 7)	0.08
1	4959G	4	3/4" HEAVY SQUARE NUT (A563)	0.26
1		5	3/4" CABLE (3 x 7)	1.06



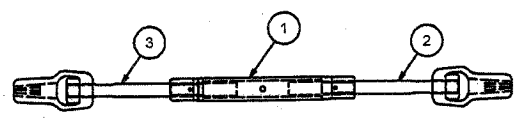
1" CABLE FIELD SPLICE - 5909G & 5910G  
(5909G SHOWN, 5910G SIMILAR)

PARTS LIST - 5910G				
QTY	PART No	ITEM	TITLE	Lbs / Each
1	3537G	1	1" STUD FLATTENED - L.H.T.	2.88
1	3022G	2	1" CABLE END CASTING	0.56
1	3908G	3	1" HEAVY HEX NUT (A563 DH)	0.47
1	4199B	4	3/4" CABLE WEDGE (3 x 7)	0.08
1		5	3/4" CABLE (3 x 7)	



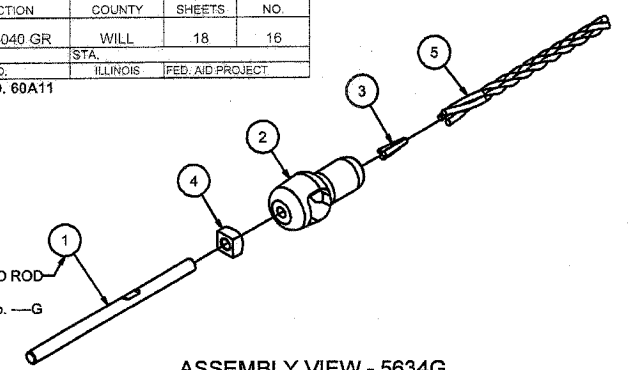
3/4" CABLE SPLICE - 5698G  
(OPEN BODY STYLE)

PARTS LIST - 5698G				
QTY	PART No	ITEM	TITLE	Lbs / Each
1	5711G	1	3/4" TURNBUCKLE OPEN BODY STYLE	10.69
1	5634G	2	3/4" STUD ASSEMBLY L.H.T.	5.74
1	5635G	3	3/4" STUD ASSEMBLY R.H.T.	5.74



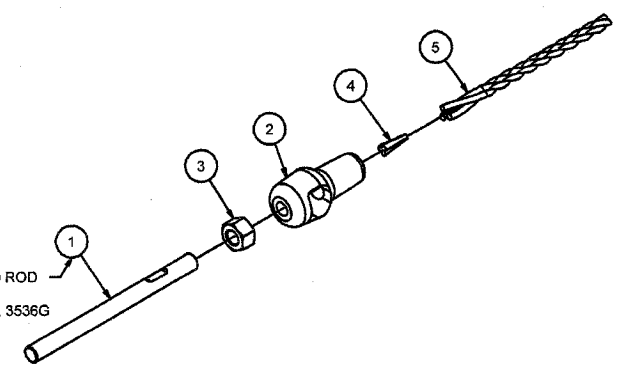
1" CABLE SPLICE - 5633G  
(CLOSED BODY STYLE)

PARTS LIST - 5633G				
QTY	PART No	ITEM	TITLE	Lbs / Each
1	5826G	1	1" CASS TURNBUCKLE CLOSED BODY STYLE	4.81
1	5909G	2	1" STUD ASSEMBLY L.H.T.	3.99
1	5910G	3	1" STUD ASSEMBLY R.H.T.	3.99



ASSEMBLY VIEW - 5634G  
(5634G SHOWN, 5635G SIMILAR)

LEFT HANDED THREADED ROD SHOWN, RIGHT HANDED THREADED ROD PART No. —G



ASSEMBLY VIEW - 5909G  
(5909G SHOWN, 5910G SIMILAR)

LEFT HANDED THREADED ROD SHOWN, RIGHT HANDED THREADED ROD PART No. 3536G

NOTES:

IN LIEU OF BLACK SPACER 5703B SUPPLY YELLOW SPACER 5705B OR WHITE SPACER 5706B. (AS REQUIRED PER PROJECT PLANS)

IF REQUIRED PER PROJECT PLANS SUPPLY:  
CABLE PULLING TOOL 5850B  
CABLE TENSIONING METER 5849B OR 5878B  
CABLE THERMOMETER 5709H

<p>CASS-TL4 CABLE GUARDRAIL SAFETY SYSTEM</p>		GALV SPEC:	
		SHIPPING WT:	
<p>TRINITY HIGHWAY SAFETY PRODUCTS, INC.</p>		DRW: E.A.S	12/2/2005
		CHK:	
<p>PROJ: CASS-TL4</p>		SHT: 3 OF 5	SIZE: D
		DWG NO:	REV
		SS-740	2



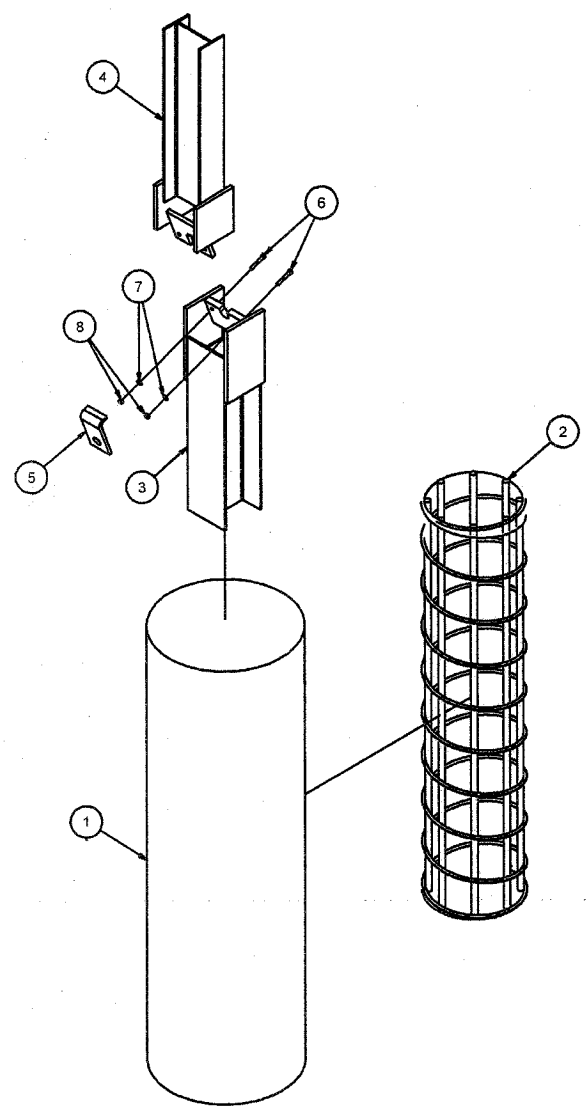
PARTS LIST				
QTY	PART No	ITEM	TITLE	Lbs / Each
1		1	CONCRETE FOOTING - CRP POST	1274.10
1	33916B	2	REINFORCING CAGE - CRP POST	68.07
1	33934A	3	CRP - LOWER POST	51.80
1	33935A	4	CRP - UPPER POST	31.57
1	33909G	5	CASS CABLE BRACKET	1.92
2	3248G	6	5/16 HEX BOLT x 2" (SAE Gr.5)	0.06
2	5831G	7	5/16 FLAT WASHER (SAE Gr.5)	0.00
2	5832G	8	5/16 DIA. HEX NUT (SAE Gr.5)	0.01

PARTS LIST				
QTY	PART No	ITEM	TITLE	Lbs / Each
1	33936A	1	CRP - LOWER POST	178.57
1	33935A	2	CRP - UPPER POST	31.57
1	33909G	3	CASS CABLE BRACKET	1.92
2	3248G	4	5/16 HEX BOLT x 2" (SAE Gr.5)	0.06
2	5831G	5	5/16 FLAT WASHER (SAE Gr.5)	0.00
2	5832G	6	5/16 DIA. HEX NUT (SAE Gr.5)	0.01

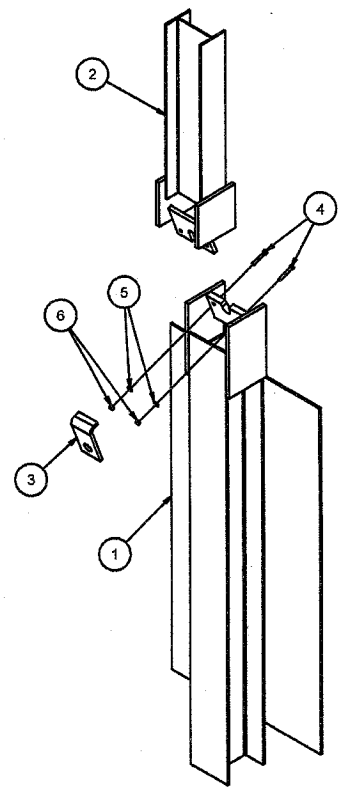
PARTS LIST				
QTY	PART No	ITEM	TITLE	Lbs / Each
1		1	CONCRETE FOOTING - LINE POST	309.19
1	33908G	2	SLEEVE - TERMINAL LINE POST	20.90
1	5836B	3	CONCRETE REINFORCING RING	0.88
1	33910G	4	350-TL3 TERMINAL POST	28.63
1	5839B	5	SLEEVE COVER - S3 ANCHOR POST	0.11
3	5825G	6	CABLE LOCK BOLT (A307)	0.12
3	3245G	7	5/16 DIA. HEX NUT (A563)	0.01
2	5919B	8	#4 REBAR - TERMINAL POST	1.78

PARTS LIST				
QTY	PART No	ITEM	TITLE	Lbs / Each
1		1	CONCRETE FOOTING - LINE POST	309.19
1	33908G	2	SLEEVE - TERMINAL LINE POST	20.90
1	5836B	3	CONCRETE REINFORCING RING	0.88
1	33955G	4	350-TL4 TERMINAL POST	32.42
1	5839B	5	SLEEVE COVER - S3 ANCHOR POST	0.11
3	5825G	6	CABLE LOCK BOLT (A307)	0.12
3	3245G	7	5/16 DIA. HEX NUT (A563)	0.01
2	5919B	8	#4 REBAR - TERMINAL POST	1.78

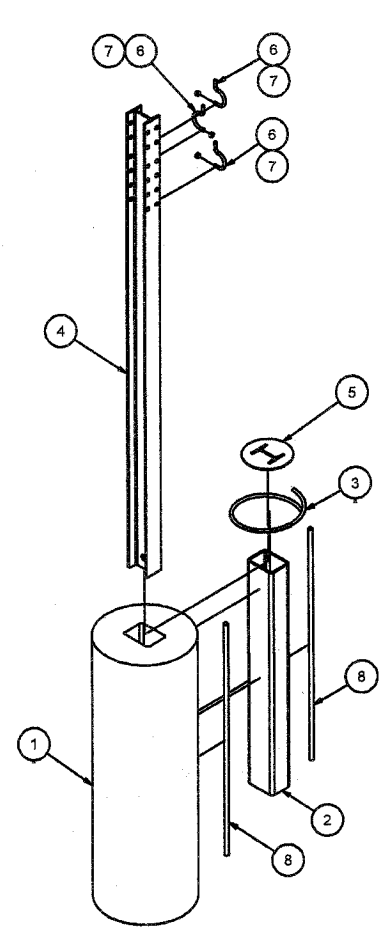
PARTS LIST				
QTY	PART No	ITEM	TITLE	Lbs / Each
1	33903A	1	350-TL3 TERMINAL POST w/ SOIL PLATE	42.25
3	5825G	6	CABLE LOCK BOLT (A307)	0.12
3	3245G	7	5/16 DIA. HEX NUT (A563)	0.01
2	4779G	3	3/4 HEX BOLT x 4 1/2" (A325)	0.09
2	9021G	2	BEARING ANGLE (A36)	3.81
2	3701G	4	3/4 FLAT WASHER (F436)	0.01
2	3711G	5	3/4 HEX NUT (A194 2H)	0.02



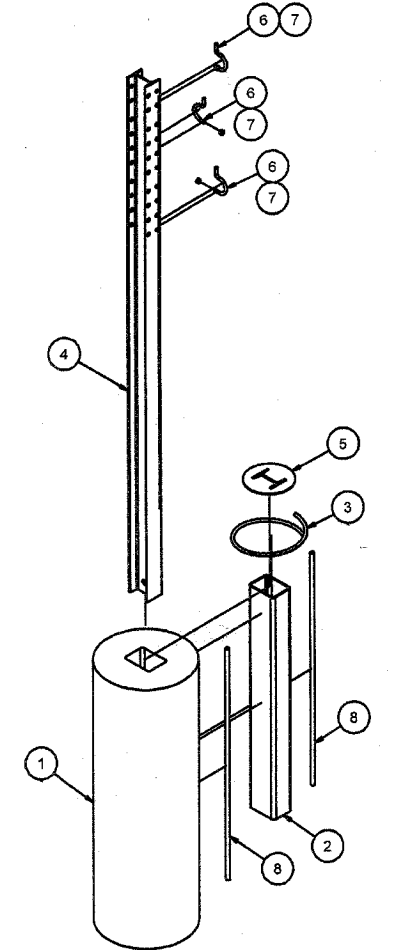
**CRP TERMINAL POST - IN CONCRETE**  
(CCT TERMINAL POST 1 - 3)  
(POST OPTION #1 SHOWN)



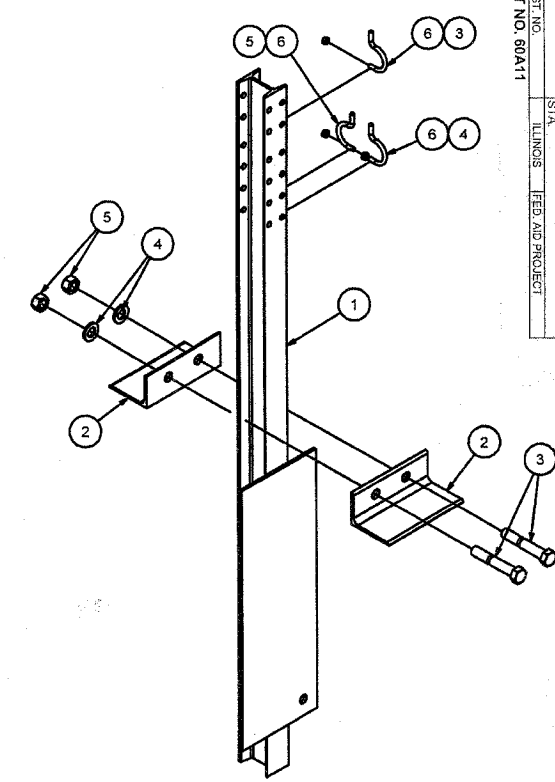
**CRP TERMINAL POST - DRIVEN**  
(CCT TERMINAL POST 1 - 3)  
(POST OPTION #2 SHOWN)



**TERMINAL LINE POST - IN CONCRETE**  
(CCT TERMINAL POST 4 - 7)  
(POST OPTION #1 SHOWN)



**TERMINAL LINE POST - IN CONCRETE**  
(CCT TERMINAL POST 8 - 9)  
(POST OPTION #1 SHOWN)

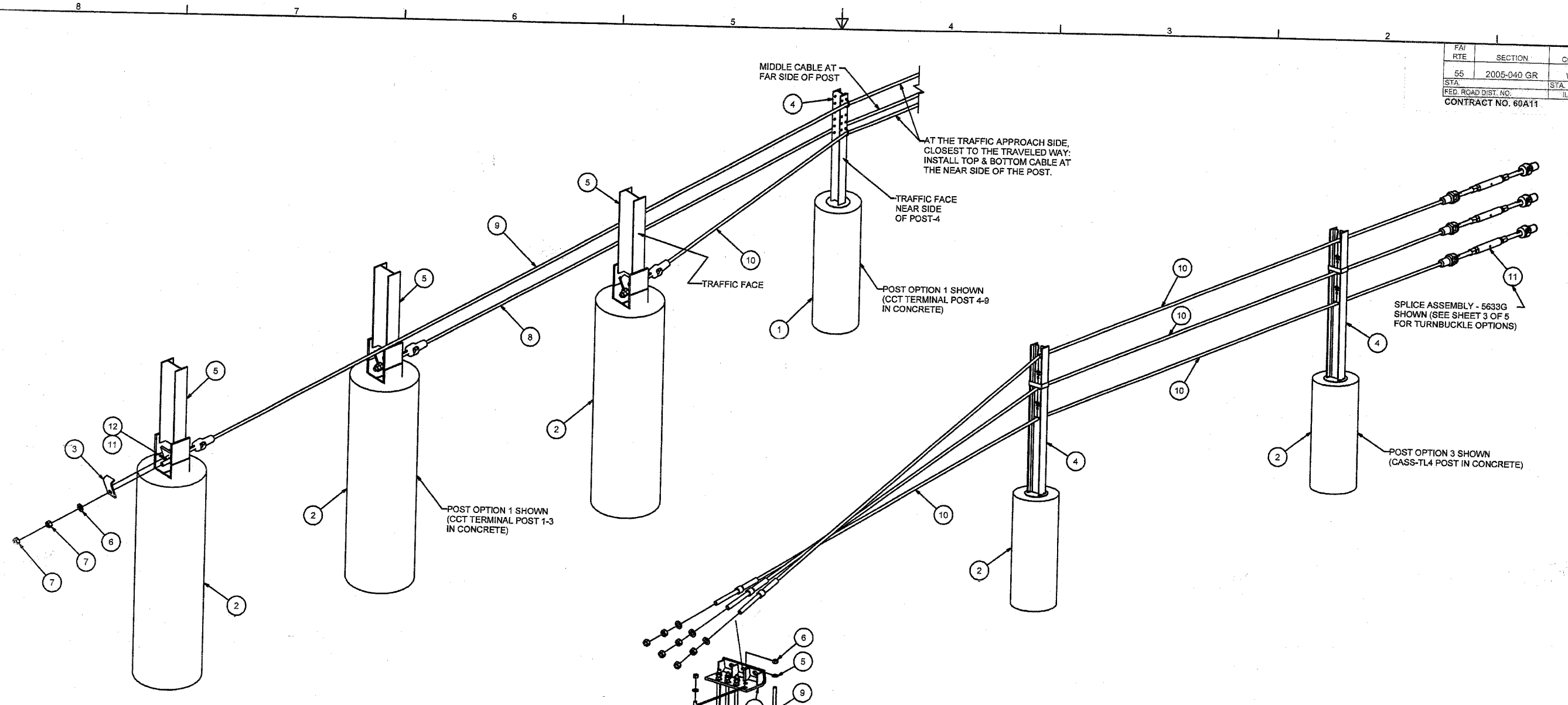


**TERMINAL LINE POST - WITH SOIL PLATE**  
(CCT TERMINAL POST - 4)  
(POST OPTION #2 SHOWN)

FAI	SECTION	COUNTY	TOTAL SHEETS
RTE	2005-040 GR	MILL	18
STA		STA	17
CONTRACT NO. 80A11		ILLINOIS	FED. AID PROJECT

<b>CASS-TL4 CABLE GUARDRAIL SAFETY SYSTEM</b>		GALV SPEC:
		SHIPPING WT:
<b>TRINITY HIGHWAY SAFETY PRODUCTS, INC.</b>		DRW: E.A.S 12/2/2006
		CHK:
PROJ: CASS-TL4	DWG NO: SS-740	REV: 2

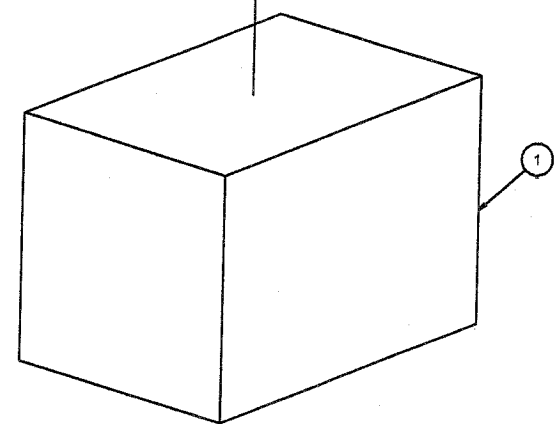
PAI	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2005-040 GR	WILL	18	18
STA	STA	ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60A11				



**CASS-TL4 CABLE TERMINAL**  
(SHOWN WITH POST OPTION 1)

QTY	PART No	ITEM	TITLE	Lbs / Each
6		1	CONCRETE FOOTING - LINE POST	309.19
3		2	CONCRETE FOOTING - CRP POST	1274.10
3	33909G	3	CASS CABLE BRACKET	1.92
4	33910G	4	350-TL3 TERMINAL POST	28.63
3	33935A	5	CRP - UPPER POST	31.57
3	4902G	6	1" FLAT WASHER (F436)	0.01
6	4903G	7	1" HEX NUT (A194 2H)	0.04
1	5817G	8	CRP - TOP CABLE ASSEMBLY [54'-3"]	92.34
1	5818G	9	CRP - MIDDLE CABLE ASSEMBLY [48'-0"]	101.81
1	5819G	10	CRP - BOTTOM CABLE ASSEMBLY [41'-9"]	83.04
6	5831G	11	5/16 FLAT WASHER (SAE Gr.5)	0.00
6	5832G	12	5/16 DIA. HEX NUT (SAE Gr.5)	0.01

QTY	PART No	ITEM	TITLE	Lbs / Each
1		1	CONCRETE ANCHOR BLOCK	8011.20
3		2	CONCRETE POST - CASS POST	264.40
1	33918A	3	CASS ANCHOR BRACKET	21.83
3	33954G	4	CASS-TL4 POST - CONCRETE	34.50
8	3700G	5	3/4 FLAT WASHER (F844)	0.01
8	3710G	6	3/4" HEX NUT (A563)	0.02
3	4902G	7	1" FLAT WASHER (F436)	0.01
6	4903G	8	1" HEX NUT (A194 2H)	0.04
8	5134G	9	3/4 DIA HOOK BOLT (A307)	4.39
3	5867G	10	CCA - ANCHOR CABLE [25'-0"]	30.9
3	5833G	11	FIELD SPLICE ASSEMBLY - 1"	12.79



**CASS-TL4 CABLE ANCHOR**  
(SHOWN WITH POST OPTION 1)

<b>CASS-TL4 CABLE GUARDRAIL SAFETY SYSTEM</b>		GALV SPEC:	
		SHIPPING WT:	
DRW:	E.A.S	12/22/2005	
CHK:			
SHT: 5 OF 5	SIZE: D		
DWG NO:	REV		
SS-740	2		

PROJ. CASS-TL4

3-29-06